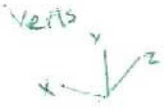
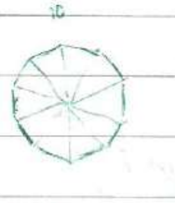


Spin and they all spin relative to the spinner. To a whirling dervish the stars fly quick circles around humble beings. In this way, their souls are free.

MINETEST
22-8

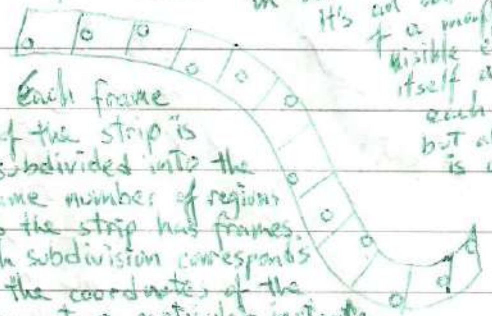
rotating coin MRSWD

~~that~~ should be a collectible



I have just found that a single convex face can have as many vertices as you want, ~~so~~ this reduces the number of faces and thus the workload.

The idea behind getting an object file to run a dynamic model is to split the texture mapping for each instance using alternating opacities in an animation set. It's an animated set of a mapping whose visible element is itself a set. each frame, but all but one is opaque.



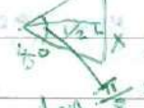
Each frame of the strip is subdivided into the same number of regions as the strip has frames. Each subdivision corresponds to the coordinates of the coin at a particular instance of its animation.

The object file ~~comprises of~~ for the coin would have n times as many vertices, mappings and faces as a static model. For an octagonal one that's given 12 instances of resolution that's (if we're confining our convex regions to 3 and 4 sides) as little as $14 \times 12 = 168$, and with a single face coin side mapping only 120.

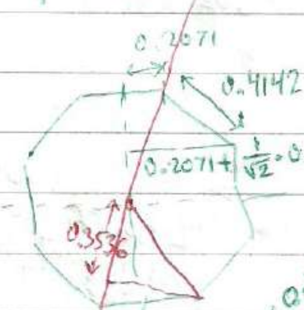
note
I want the coin to be collected as either tails, needs two types of coin that show different in inventory but are craftable to each other.

for a 12-frame cycle, 6 sets of defining numerics are repeated, just the coin's other side gets the spotlight.

I may go with an octagonal coin but with 12 frames.



$\tan\frac{\pi}{8} = \frac{x}{\frac{1}{2}} = 2x$



$0.2071 + \frac{1}{\sqrt{2}} \cdot 0.4142 =$

$$\begin{array}{r} 0.4142 \\ \times\ 0.7071 \\ \hline .00004142 \\ .0028994 \\ .28994 \end{array}$$

looks like it's just .29288082

two points to rotate, ≈ 0.2929 with symmetries.

$$\begin{array}{r} 0.2929 \\ +\ 0.2071 \\ \hline 0.5000 \end{array}$$ ✓

$\sin\frac{x}{2} =$

? $\cos^2 + \sin^2 = 1$

Using / $\sin 2x$ $\sin(A+B) = \sin A\cos B + \sin B\cos A$
$\cos A+B = \sin A\sin B + \cos A\cos B$

$\sin 2A = 2\sin A\cos A$

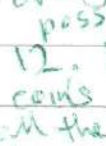
$\cos 2A = \sin^2 A + \cos^2 A = 1$ □

Don't think that's the formula

Cos is symmetric over neg and non-neg

Calculator  : $\tan 22.5° =$
0.414213562373...

So 0.2071 out from the middle for the orthogonal edges.



It might be cool to set 10 frames since we can.-- nope, I want this orthogonal as possible!

12. But if the coin's side reaches all the lengths of the cube, and it rotates, there's going to be protrusion out of its $1m^3$ space so it'll look a bit weird next to a wall,

~~But if it's shortened it can't string 'em~~ I was going to say but then I realised it's not an issue with so few frames. When is it an issue? How many frames max? Let the coin be 0.1... Hey! let's set the coin so that it's a diagonal that stretches end to end, and widen it too.

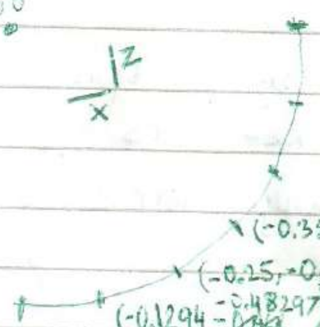
Octagonal: 0.2071

$\alpha = \sin^{-1}(0.2071)$

It's about 12°

Suppose we go with 15°

Or the amount of degrees that makes it the only measurement of its kind

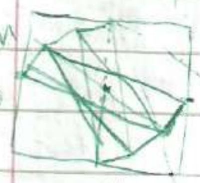


(−0.3536, −0.3536)

(−0.25, −0.433)

(−0.1294, −0.48297) ≈ (−0.1294, −0.483)

P_2 (0, −0.5)



plan view

great! many vertices needed because of a symmetry

can be re-used.

Yeah, if it's 15° then we have it. cos the one before it is −15°, that's 30° phase shift and there's 12 of them.

$1-(0.258819045)^2 = 0.9330127019$

$0.96593^2 \approx 0.9330207649$

$0.866025^2 = 0.7499993006$

P_{1-4}: {y = {−0.5, −0.2973

4 × 12 = 48 vertices

oops! that's 60° not 30°!

top: P_1 = {(0, 0.5, −0.5) (−Sin30°, 0.5,

Sin 15° = 0.25881904510252...

≈ 0.2588

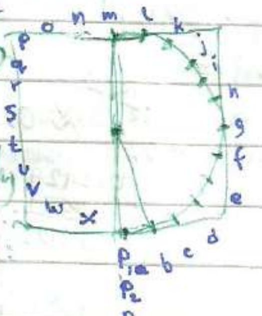
{So that's the thickness of our gold coins of RS ...}

ABRAKADABRA!

The magic coin! Eternally spinning, the world of its disk lets the stars roam free. Bring your gold and emojis!

On the other hand, if we just have both sides of the coin the same, we get twice the resolution by switching to 15° turns and dropping the second half of the animated strip where the coin has done a half turn.

Going with 15° turns, the coin is thinner.



but... since the second half of the frame just repeat the vertices, it shouldn't be too much stress leaving it in.

but 0.2588 Seems a lot, doesn't it? oh, it's half that. The 15° is measured from the centre. from the opposite edge its only 7½°

coin.png made spins on edges, which are long lengths, 120 vertices. silver

60 vertices gold or whatever

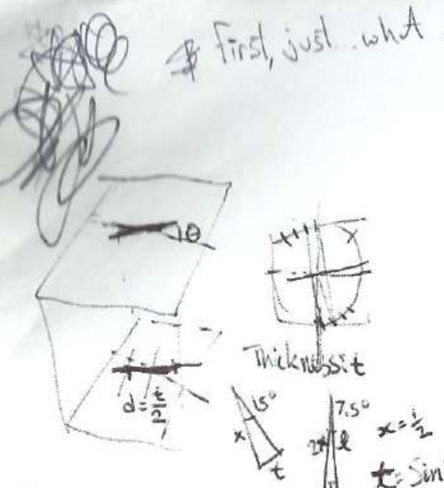
But... there's no comparison... well $A_g : A_s$ ≈ Sin30° : Sin15°

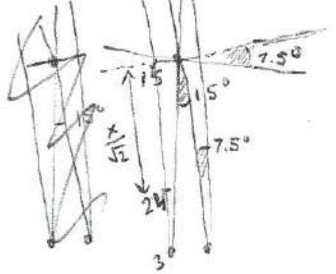
($\frac{1}{2}AB\sin C = A$)

SINCE I'm not really caught up on how to ... oh yeah I remembered: (use random number: math.random(0,1) with labelling in itemdrop section of the upgrades for two versions of my item or coin)

Well, Geometrically it's a bit more satisfying, more like a coin, like, but hard to call.

First, just... what are the coordinates for your problem??





Suppose the rings are clock face with 6 on neg z line, then V_1 starts just before 9, V_2 just after 6, V_3 at 6, V_4 same's V_2, V_5 same's V_1, V_6 nearly 12, V_7 mid between 11 and 12, V_8 same's V_6, and they all increase their index per face by 8 until they trace a half circle. Anticlockwise.

Labelling is unique, at least for $V_{1,3,5,7}$ but the others: does the opposite side of the coin trace an alternate set?

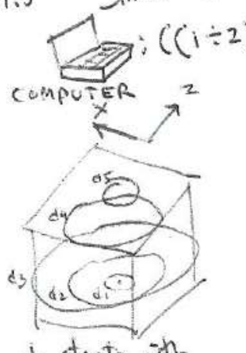
📖: $\sin\frac{A}{2} = \frac{1}{2}(1-\cos A)$

$\sin 7.5° = \sqrt{\frac{1}{2}\left(1-\sqrt{\frac{1}{2}\left(1+\frac{\sqrt{3}}{2}\right)}\right)}$

$d = 0.06526309611...$
$\simeq 0.0653$
$l = 0.9914448613 7381...$
$\simeq 0.9915$

COMPUTER: ((1÷2)×√(1−√((1÷2)×((1÷2)×√(3)+1)))
= 0.1845919112825145...
Too big though, never mind now on with it! The coins lad!

= (1÷((1÷2)×(√(2)))×(sin₀(7.5))) as well
" $\frac{1}{2\sqrt{2}}\sin 7.5°$



Relabel so that Octagon's faces are intuitive when mapping the

See what happens when you rotate one face alone:

d_1 starts with 7.5° offset
d_3 starts at exactly (0, 0, −0.5)
d_2 is in between but with of course the same phase 15°

angles: d_1: ... Sin

numbers: ✓
I (0.06470467, −0.5, −0.0085185)
II (0.0185567, −0.3535534, −0.35904719)
III (0, 0, −0.5)
IV (0.0185567, 0.3535534, −0.3590472)
V (0.0647047, 0.5, −0.0085185)
VI (0.11085 ~~0.1111108~~, 0.3535534, ~~0.3450349~~ 0.3420102)
VII (0.12940952, 0, 0.4829629)
VIII (0.11085 ~~0.1111108~~, −0.3535534, ~~0.3450349~~ 0.3420102)

but it can't be 0.0647... − 0.1845...
it's negative and V_{2x} is positive ≥ 0 like V_{1x} and V_{3x}

$\frac{1}{2\sqrt{2}} = 0.35355339...$
That times ($\sin 7.5° \simeq 0.1305$)
is 0.0461479778...
than deducted from ($d\cos 7.5° = V_{1x}$)
is 0.06470467 − 0.0461479778...
≈ 0.0185566922...
≈ ●

alternate set?
well, $\vec{V}_{2x,z} + \vec{d}_{xz\,plane}$
is (0.0185567, −0.35904719)
+ (−0.1294093, 0.017037)
= (0.1108526, −0.34201019)
So the angle is (from neg z)
$\tan^{-1}\left(\frac{V_y}{V_x}\right)$: 17.95858538585...
17.9585853858 56...
and the first angle for V_2 is $\tan^{-1}\left(\frac{V_{2x}}{-V_{2z}}\right)$ (look at diagram)
= 2.95859558 6839...
which looks to be 15° apart until you realise it's going the other direction and the difference in angle is the sum of these numbers.

$V_1 = (d\cos 7.5°, -0.5, -d\sin 7.5°)$
$V_3 = (0, 0, -0.5)$
$V_2 = \left(V_{1x} - \frac{1}{2\sqrt{2}}\sin 7.5°, -\frac{1}{2\sqrt{2}}, V_{1z} - \frac{1}{2\sqrt{2}}\cos 7.5°\right)$
$V_4 = \left(V_{2x}, \frac{1}{2\sqrt{2}}, V_{2z}\right)$
$V_5 = (V_{1x}, 0.5, V_{1z})$
$V_6 = \left(V_{1x} + \frac{1}{2\sqrt{2}}\sin 7.5°, \frac{1}{2\sqrt{2}}, V_{1z} + \frac{1}{2\sqrt{2}}\cos 7.5°\right)$
$V_7 = \left(\frac{\sin 15°}{2}, 0, \frac{\cos 15°}{2}\right)$
$V_8 = \left(V_{6x}, -\frac{1}{2\sqrt{2}}, V_{6z}\right)$

A $\begin{pmatrix} \cos\phi & \sin\phi \\ -\sin\phi & \cos\phi \end{pmatrix} \begin{pmatrix} x \\ z \end{pmatrix}$ rotates ϕ ~~17.5~~ 15°

Rough:
📖 TABLES: $\sin 7.5° = 0.1305$

How is VI and V_y different (not counting negatives)
Should be same
2 is other side (x-wise) of 1 to 8, which mirrors V_y there

So.
Do I want to add 48 more vertices to the list?
Maybe the coin... nah.
well it's just vertices. Only 48?

$V_{2x} = 0.0185567$
$V_{1x} = 0.06470467$
$V_{3x} = 0.11085...$ ✓

Δ = 0.04614798 hmm and matrices are doing the numbers for you. C'mon. Hmm. OK. Hm

So $(0, -\cos\frac{\pi}{8}, \sin\frac{\pi}{8})$ goes to whatever $(0, -\sin\frac{\pi}{8})$ goes to

I suppose

$\begin{pmatrix} \cos & +\sin \\ -\sin & \cos \end{pmatrix}\begin{pmatrix} 0 \\ -1 \end{pmatrix} \rightarrow \begin{pmatrix} +\sin \\ -\cos \end{pmatrix}$

$\sin\frac{\pi}{8}$

'x is a little less, z is a little more'

but if it was z, x and still same angle rotation,

$\begin{pmatrix} \cos & \sin \\ -\sin & \cos \end{pmatrix}\begin{pmatrix} 0 \\ -1 \end{pmatrix} \rightarrow \begin{pmatrix} -\sin \\ -\cos \end{pmatrix}$

'x is a little more, z is a little more' must give a different result

but then it's not the same angle, is it?

and different

with the axes defined this way, we should suppose θ is going the other way

$\begin{pmatrix} c & -s \\ s & c \end{pmatrix}\begin{pmatrix} c & s \\ -s & c \end{pmatrix} = \begin{matrix} c^2+s^2 & cs-sc \\ sc-cs & s^2+c^2 \end{matrix} = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix}$

$x' = -\sin\frac{\pi}{8}(\sin 7.5°)$

$z' = -\sin\frac{\pi}{8}(\cos 7.5°)$

$\begin{pmatrix} \cos 7.5° & \boxed{\sin 7.5} \\ ? & \cos 7.5° \end{pmatrix}\begin{pmatrix} 0 \\ -\sin\frac{\pi}{8} \end{pmatrix}$

probably definitely –

well that seems ok.

but... does it do the job for the other axes? z, x?

$v = (0, -1)$

$\begin{pmatrix} \cos\frac{\pi}{4} & \boxed{\sin\frac{\pi}{4}} \\ ? & \cos\frac{\pi}{4} \end{pmatrix}\begin{pmatrix} 0 \\ -1 \end{pmatrix} = \begin{pmatrix} -\sin\frac{\pi}{4} \\ -\cos\frac{\pi}{4} \end{pmatrix}$

$x' = -1(\sin\frac{\pi}{4})$

$z' = -1(\cos\frac{\pi}{4})$

Yeah Great.

the normals!

{ $(-\sin\frac{\pi}{8}\sin 7.5°, -\cos\frac{\pi}{8}, -\sin\frac{\pi}{8}(\cos 7.5°))$,

$(-\cos\frac{\pi}{8}\sin 7.5°, -\sin\frac{\pi}{8}, -\cos\frac{\pi}{8}(\cos 7.5°))$,

$(-\cos\frac{\pi}{8}\sin 7.5°, \sin\frac{\pi}{8}, -\cos\frac{\pi}{8}(\cos 7.5°))$,

$(-\sin\frac{\pi}{8}\sin 7.5°, \cos\frac{\pi}{8}, -\sin\frac{\pi}{8}(\cos 7.5°))$,

$(\sin\frac{\pi}{8}\sin 7.5°, \cos\frac{\pi}{8}, \sin\frac{\pi}{8}(\cos 7.5°))$,

$(\cos\frac{\pi}{8}\sin 7.5°, \sin\frac{\pi}{8}, \cos\frac{\pi}{8}(\cos 7.5°))$,

$(\cos\frac{\pi}{8}\sin 7.5°, -\sin\frac{\pi}{8}, \cos\frac{\pi}{8}(\cos 7.5°))$,

$(\sin\frac{\pi}{8}\sin 7.5°, -\cos\frac{\pi}{8}, \sin\frac{\pi}{8}(\cos 7.5°))$ }

$\sin\frac{\pi}{8}$, Sin7.5, $\cos\frac{\pi}{8}$, Cos7.5

0.3826834323650...

0.130526192222...

0.923879532...

0.99144486...

$S\frac{\pi}{8}$ ⊗ C7.5: 0.3794095225...

S7.5 ⊗ $S\frac{\pi}{8}$: 0.04995021125...

S7.5 ⊗ $C\frac{\pi}{8}$: 0.120590477449...

C7.5 ⊗ $C\frac{\pi}{8}$: 0.9159756615...

Using excel will produce the vns for obj.

Fixing vs in kom.obj:

9 10 11 12 13 14 15 16

previous labelling: 37

58 – dfe – 15

in strip, strip was only 8 pixels from top, should have been 15, so corner edge

16 – smudge but also it rendered the edge for 4 with the overlap above.

didn't render for 8

18, 19, 24 } smudge

→ strip's fine.

after editing 16 it's more wrong. Switched back! Let's look at 17, 18.

I'm a good guy.

So How do we count 'em? On horses like Dearborn in DT7?

No. we start with...

A turn of 15° adds nothing to the wide side, the bottoms modulate, and the halvsies are unique the whole turn round.

Since they come up so much then, we start with them going in that order of appearance non-uniqueness.

At the wide side, go 1,2,3 from $\theta = 0$ counting θ anticlockwise from neg z. To 24. Then do bottom and top, starting with the vertices that share a face with that first one for which the vertices were listed on the previous page. Bottom then top. ~~[struck out]~~ Then the others.

Order of appearance according to previous page's diagram: $\{V_3, V_1, V_5, V_2, V_4, V_6, V_8\}$ (↑ includes V_7; just going round with them labels 'em all.)

relablin' (just order of counting)

$V_1\,(0, 0, -0.5)$ 24×M and Second face is + 11(mod 24) to this, while opposite vertex on same face is + 12 (mod 24) to it.

$V_2\,(0.0647047, -0.5, -0.0085185)$ 24×M and second face is mod 12 to this

$V_3\,(0.0647047, 0.5, -0.0085185)$ 24×M "

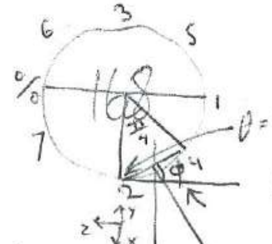
$V_4\,(0.0185567, -0.3535534, -0.3590472)$ 24×M

$V_5\,(0.0185567, 0.3535534, -0.3590472)$ "

$V_6\,(0.1108526, 0.3535534, 0.3420102)$ "

$V_7\,(0.1108526, -0.3535534, 0.3420102)$ "

where M is a $\begin{pmatrix} \cos & \sin \\ -\sin & \cos \end{pmatrix}_{\phi=15°}$ operation series on $\begin{pmatrix} x \\ z \end{pmatrix}$ vector subsets of $\{V\}$



$\theta = \frac{\pi}{4}$

$\frac{(\pi - \frac{\pi}{4})}{2} = \frac{3\pi}{8}$

$\phi = \frac{\pi}{2} - \frac{3\pi}{8} = \frac{\pi}{8}$

So the next 8 faces have quads labelled as follows! (↑ for vts of obj)

~~{4, 2, 97, 157}~~, ~~{157, 97, 157,~~

{25, 37, 157, ~~97~~ 73}, {~~97~~ 73, 157, 2, 1}, {1, 2, 133, 97},

{97, 133, 61, 49}, {49, 61, 109, 121}, {121, 109, 13, 14},

{14, 13, 85, 145}, {145, 85, 37, 25}

normals rotate ~~find~~ with same rotation matrix

first 10 normals: $(\cos 7.5, 0, -\sin 7.5)$, $(-\cos 7.5, 0, \sin 7.5)$

then rotate $\{(0, -\cos\frac{\pi}{8}, -\sin\frac{\pi}{8}), (0, -\sin\frac{\pi}{8}, -\cos\frac{\pi}{8}), (0, \sin\frac{\pi}{8}, -\cos\frac{\pi}{8})\}$

$\{(0, \cos\frac{\pi}{8}, -\sin\frac{\pi}{8}), (0, \cos\frac{\pi}{8}, \sin\frac{\pi}{8}), (0, \sin\frac{\pi}{8}, \cos\frac{\pi}{8})\}$

$\{(0, -\sin\frac{\pi}{8}, \cos\frac{\pi}{8}), (0, -\cos\frac{\pi}{8}, \sin\frac{\pi}{8})\}$

by the initial 7.50 degrees counterclockwise with a matrix [ ] on the horizontal plane xz

*note the axes have x going the other way!

Then face #1 uses Vertices: {1, 97, 49, 121, 14, 145, 25 → 73} incrementing with some repeats on the first three.

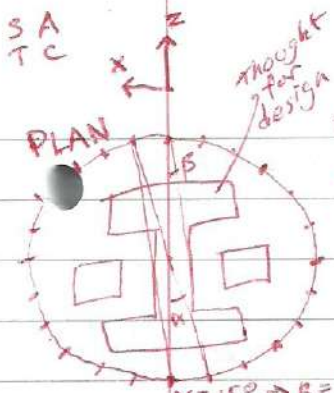
What about face #2? Taking same orientation of Tex map (or a flipside alt)

{13, 109, 61, 133, 2, 157, 37, 85}

give a full 360° for both when getting face definitions. But the V's are set this way, up to 168.

any other faces (of which there are 8×24) have incrementing vertex indices, like above, with mod on the first three reping top & sides as ~~[struck out]~~ 12; mod 24 but per instance there are symmetries.

SA
TC

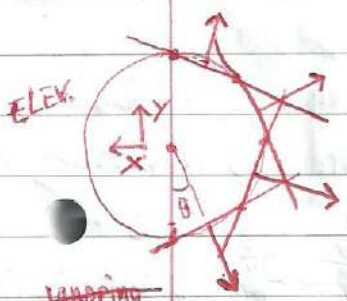


12 instances (I)
each I comprises
2+8 = 10 faces

$\alpha = 15° \Rightarrow \beta = \frac{15°}{2} = 7.5°$

then add 15° to it repeatedly:

$\{7.5°, 22.5°, 37.5°, 52.5°, 67.5°, 82.5°\}$
$\{97.5°, 112.5°, 127.5°, 142.5°, 157.5°, 172.5°\}$

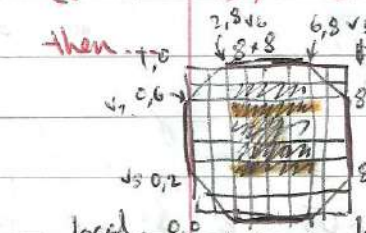


~~Lunging~~

Just looking at the flat normal, on xy plane say,

$\{(\sin\theta, -\cos\theta)\}$, $\theta = \{\frac{\pi}{8}, \frac{3\pi}{8}, \frac{5\pi}{8}, \frac{7\pi}{8}\}$

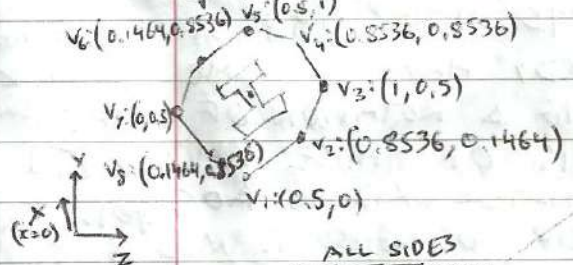
then

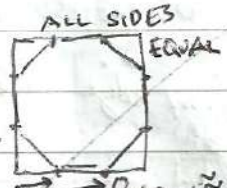


This is a test to see if I can get away with unequal edges for the octagon faces.

this is aligned with the horizontal, but the vertices ~~have alignment~~ with

but there's a single vertex at top and bottom of the model





≈ 0.69
0.6913417161825...
0.3086582838174...
0.31

Ah! the octagon was too small!

Compositions are possibly a matter of brief excel-pre-workings

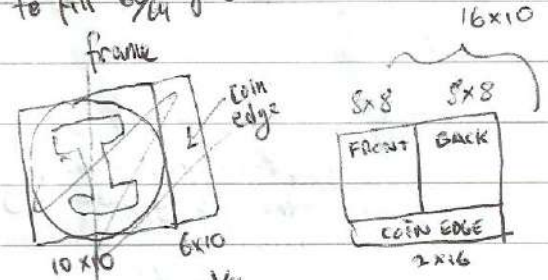
~~$V_{n+1} \to V_{n+1}$~~ add the tot v_s

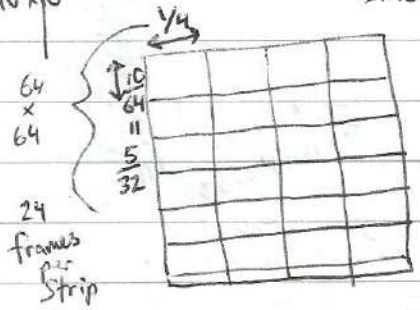
add the tot v_ts

vns are same, not indexed

fs are all just addable once the numbers made to go up by the sum of all previous completed obj file sets

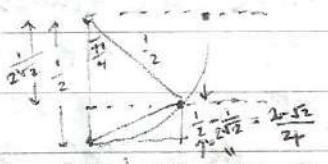
Using $64 \times 1536 :: 1 \times 24$ proj, and using 16x10 blocks to fill 60/64 of each





and 24 of those Front and back and coin edge stamps per frame.

This is easy with planning and copy and paste.



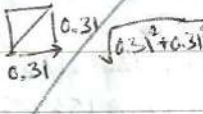
$\frac{1}{2}\left(1 - \frac{1}{\sqrt{2}}\right) = \frac{1}{2}\left(\frac{\sqrt{2}-1}{\sqrt{2}}\right) = \frac{2-\sqrt{2}}{4}$

hypotenuse (or the octagon's side length): $\sqrt{\left(\frac{1}{2\sqrt{2}}\right)^2 + \left(\frac{2-\sqrt{2}}{4}\right)^2}$

$\sqrt{\frac{1}{4\cdot 2} + \frac{4+2-4\sqrt{2}}{16}} = \frac{1}{4}\sqrt{2+6-4\sqrt{2}} = \frac{1}{4}\sqrt{2-\sqrt{2}}$

~~0.765266864...~~

$0.382683432365... = (1 \div 2) \times \sqrt{(2 - \sqrt{(2)})}$



$\sqrt{0.31^2 + 0.31^2} = \sqrt{2 \cdot \left(\frac{31}{100}\right)^2} = \sqrt{2 \cdot \left(\frac{961}{10000}\right)} = \frac{1}{100}\sqrt{1922}$

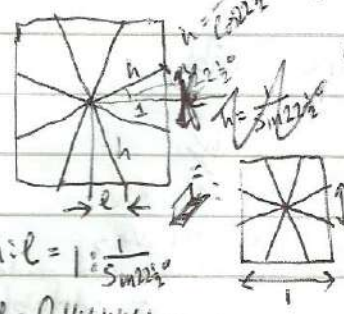
$1849 \div 43^2$ $1936 - 44^2$

0.4384

$0.69 - 0.31 = 0.38$

$\frac{121}{484} \cdot \frac{12}{40}$ $\frac{3}{1936}$

0.6913417161825 − 0.30865828 = 0.38268343



$h = \frac{1}{2\sin 22\frac{1}{2}^\circ} = 0.5411961\ldots$ ← off. got 0.521 for what should be $\frac{1}{2}$

$h : l = 1 : \frac{1}{\sin 22\frac{1}{2}^\circ}$

$h = \frac{1}{\sin 22\frac{1}{2}^\circ}$

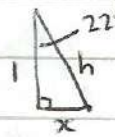
0.6464, 0 → 1, 0.35355339...

$l = 0.1464466094\ldots$

side of octagon: $0.2928932188\ldots$

$\sqrt{(\text{sqr}(0.35355339) + \text{sqr}(0.35355339))} = 0.4999999999160984199296605\ldots$

was expecting $0.2928932188\ldots$



$\tan 22\frac{1}{2}^\circ = x$

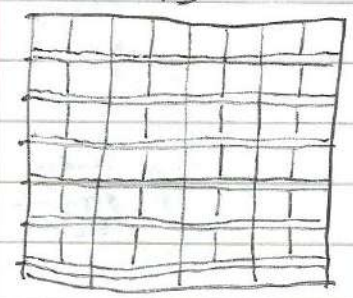
$x =$

: 0.41421356... the desired side length

0.7071067811... that's $\frac{1}{\sqrt{2}}$

0.2928932188...

these numbers reconfigured:



A frame 4x4

So... the little boxes are 8x8 and if the whole box at large is a unit then they're .125 x .125 boxes and then two important numbers 0.2928932188... and 0.7071067811... should be given it. It's simple enough.

first divide by 8:

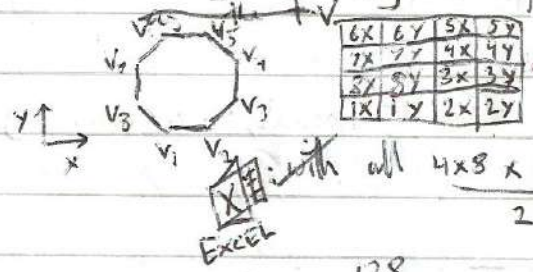
$0.03661165523^{(4)}\ldots, 0.0883883476^{(3)}\ldots$

Going along rows, the phase is $\frac{1}{8}$ so just add .125, 7 times.

going down, the phase is $\frac{5}{32}$, which is 0.15625, so add that 5 times. The thing reads from a square,

so that's all the vts!

In Excel, using a 4x4 range one has room for 8 vertex coordinates corresponding to the octagon sitting on a flat edge,



6X	6Y	5X	5Y
7X	7Y	4X	4Y
8X	8Y	3X	3Y
1X	1Y	2X	2Y

See how they match geometrically too!

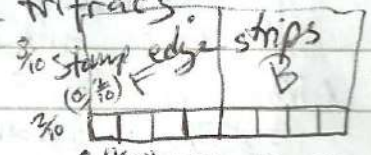
with all $\frac{4\times8 \times 4\times6}{2} = 128$ vts produced using spreadsheets,

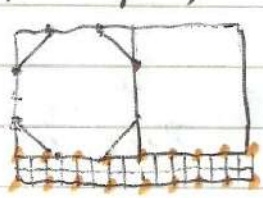
$8 \times 8 \times 6 = 384$

$\frac{128}{5} = 16$

I COULD SHOULD HAVE THE COIN ROTATE ALONG IT'S EDGE TOO, Since we already have 24 frames and 8 sides to the coin's edges, we can loop it NO Problem!

THAT CAN BE DONE BY ALTERING EITHER THE VTS HERE WITH A FUCKING SIMPLE (I ALREADY HAVE A GAME OF LIFE EDIT INVOLVING A ROTATION OF EIGHT) (sheet 3) ROTATION EDIT OF THOSE VALUES ON THE COORDINATE GRID IN AOC2401.xlsx Sheet 4, OR USING SOME MOD 8 OP ON the trifracs

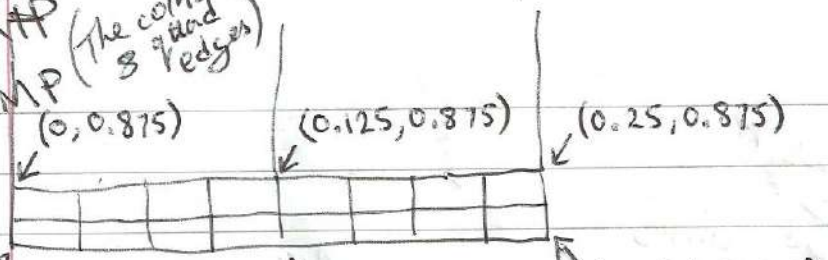




x6

It's 33 x 12 = 396 numbers to add in or just 1 set of 4 to repeat, your call. Is the coin smudged? Yeah, it's going to be.

EDGE STRIP OF STAMP (The coins 8 "and 8 edges")



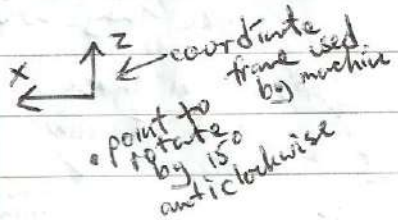
(0, 0.875 − 1/32 = 0.87500 − 0.03125 = 0.84375) (0.125, 0.84375) (0.25, 0.84375)

(0, 0.84375)

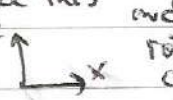
Similar to before, it's just $(+\frac{1}{64}, -\frac{5}{32})$ but first, locally, it's $(+\frac{1}{32}, -\frac{1}{32})$

Using concatenate, I could produce these bits of the obj, without all that repetition. Looks like copying to a txt file puts tab spaces in and they work fine.

The Vertices.



pretend I suppose it's like this and it's rotating clockwise instead.



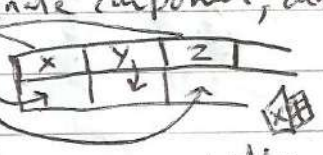
The result is the same but you see the usual order of basis vectors while the linear operator applies to it.

So I'm getting the true length (all the ys stay the same during the spin about a y-axis) of the radius of the xz-planar vertex and changing each coordinate the easy way with probably two trigonometric scalers per coordinate component, added or whatever.

$$\begin{pmatrix} \cos(-\frac{\pi}{24}) & \sin(-\frac{\pi}{24}) \\ -\sin(-\frac{\pi}{24}) & \cos(-\frac{\pi}{24}) \end{pmatrix} \begin{pmatrix} x \\ z \end{pmatrix}$$

$(x,z) = (0,-1)$ or $(0,-0.5)$ on the first vertex.

$$\begin{pmatrix} C & S \\ -S & C \end{pmatrix} \begin{pmatrix} x \\ z \end{pmatrix} = \begin{pmatrix} Cx + Sz \\ -Sx + Cz \end{pmatrix}$$



This has nothing explicit to do with the hypotenuse or radius. How could that have been used?

Yeah, it's a number, so just compute the sin and cos for it in relation to the overall circle, without these steps, like.

Like it's $|R(S,C)\{\theta_i\}, i=[1,\cdots,24]$ and $\theta_i = \{15°, 30°, 45°, \cdots, 345°, 360°\}$ and the others are just a bit off so the angles are a bit off, so we'll fix em in EXCEL (off the modulars of 15°, I mean)

Looks like could do higher res.
Maybe another time.

23:49 all should work ~~must be missing some~~
but errors.
just blank. Seems right shape in Paint 3D
Could be missing the texture perishes
just check first one.
isoker had an overlay anim but
the base was static. try
overlay it instead. if
in the case of that

Could there be two map definitions?

00:00 Switched tiles,
see the anim
works.
must be the
obj.

Obj file mysterious problem rendering.

7:51AM (Tested 1st instance only, a small file, works!)
For simplicity's sake, what if the vs were pasted one by one, one after another, with those few repeats for the first three sets, sure, but at least the numbers would be clear at a glance, since they grow together.
Also, Must try a single frame of the 64x1536 one to test coords keep well (works)

9:10
should focus on making coins collectible by intersection
+ need to stack, later.
The vts mapp the same strip pngy but... yes it's gonna work I can see it working.

9:22am new vertices done. They're just one instance after the other.
~~276~~ 16x24 = 384

10:06 The Newer obj didn't work either.
I guess it's back to stacking two see if that works.
even Paint 3D can't open it, works?
unlike first one.

x = error mappings

10:21 FINALLY the thing shows but it's Real glitchy! :)
actually, I'm thinking it'd look more reasonable (since the thing's an octagon but the y values don't change so it looks like it's JUST rotating on the y-axis) to just have the vts as they were before the 8-cycle rotation of them. Keeping the glitch though, it's cool. Eh, I'll ~~have~~ want both.

Seems the vts are mis aligned causing extra textures to appear, cc the wrong stones.

Errors: frames 16 should start back to 1

initial 1, 5, 89, 13, 17, 8, 19, 21, 29, 1
2 were off-mark.

now see how the edges got lost or missing:

Oh yeah man!
plot all vts on a huge graph!

note: the coin should absorb into me immediately, and do a formspec with a single coin symbol at top but when you remove your Limitless or very high max stack (or lower it the HUD leaves too? Or it doesn't? No it does, No it doesn't, I remember there's always coins in new areas, and when you find it, it's yours even if you... big something? No wait, scratch that! You lower the HUD Formspec counter value by simple removing x amount from inventory. Then the thing's zero-sum for everyone like boundaries server. But you could also mint them using a... highly advanced technology? On a

11:04 tidied vts, using big scatter graph

using #s vs looking at the ones that worked + fix const to fix the initial values

11:22 better, at least the shape is fixed. getting straight i.e. rotation / flank.

reverted to pre-rotating edgewise vts and it's hideously glitched out

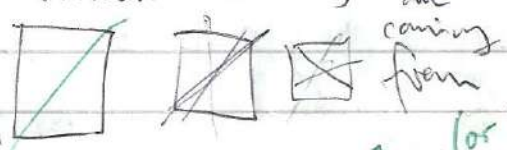
now almost perfect, I cut off the middle in orthogonal rotations back to the usual way it would rotate out in space.

OK, just frames 18, 19 and the smidges of frame #2 (back) on #s 8, 10, 24.

good on counterwise at about 0.8, 0.9

it's like 95% good enough. Practically done. and the concept can now be stopped.

Must identify WHICH ones the glitches one coming from



1, (or 13)

9/10, or 2/12

and the 10/12 is black (reversed ex)

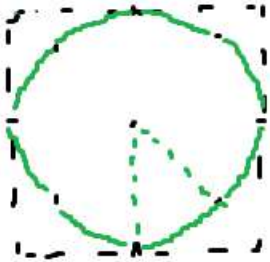
Sheet! It's done! 12:34 - 24/8/24

Yim one coin richer!

Solved - the label was one pixel lower that it should have been.

18 is another overlap glitch (waiting for 6 second capture of that frame)

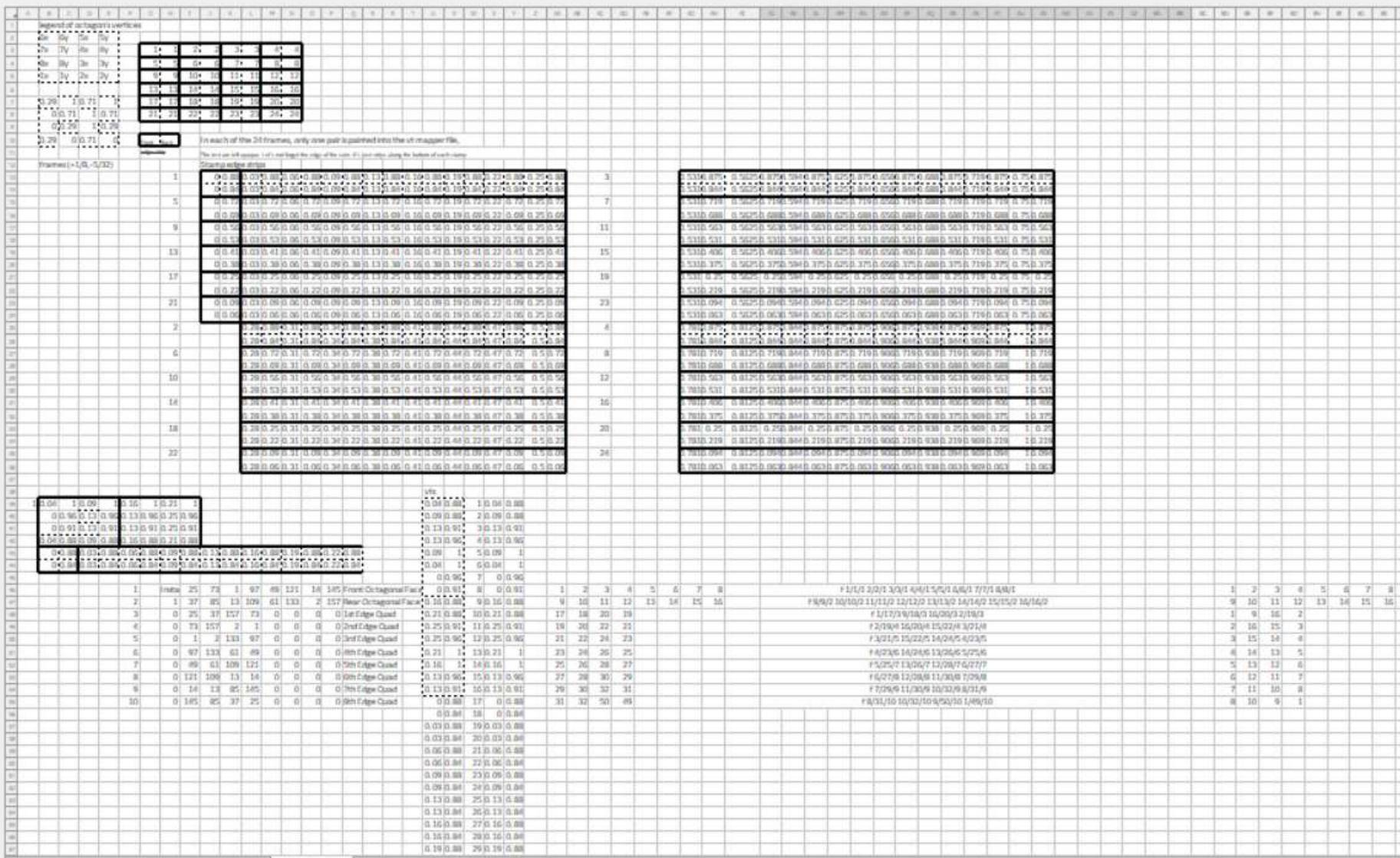
Coin



DIDN'T USE THIS
AFTER BUT
DRAWING IT
HELPED

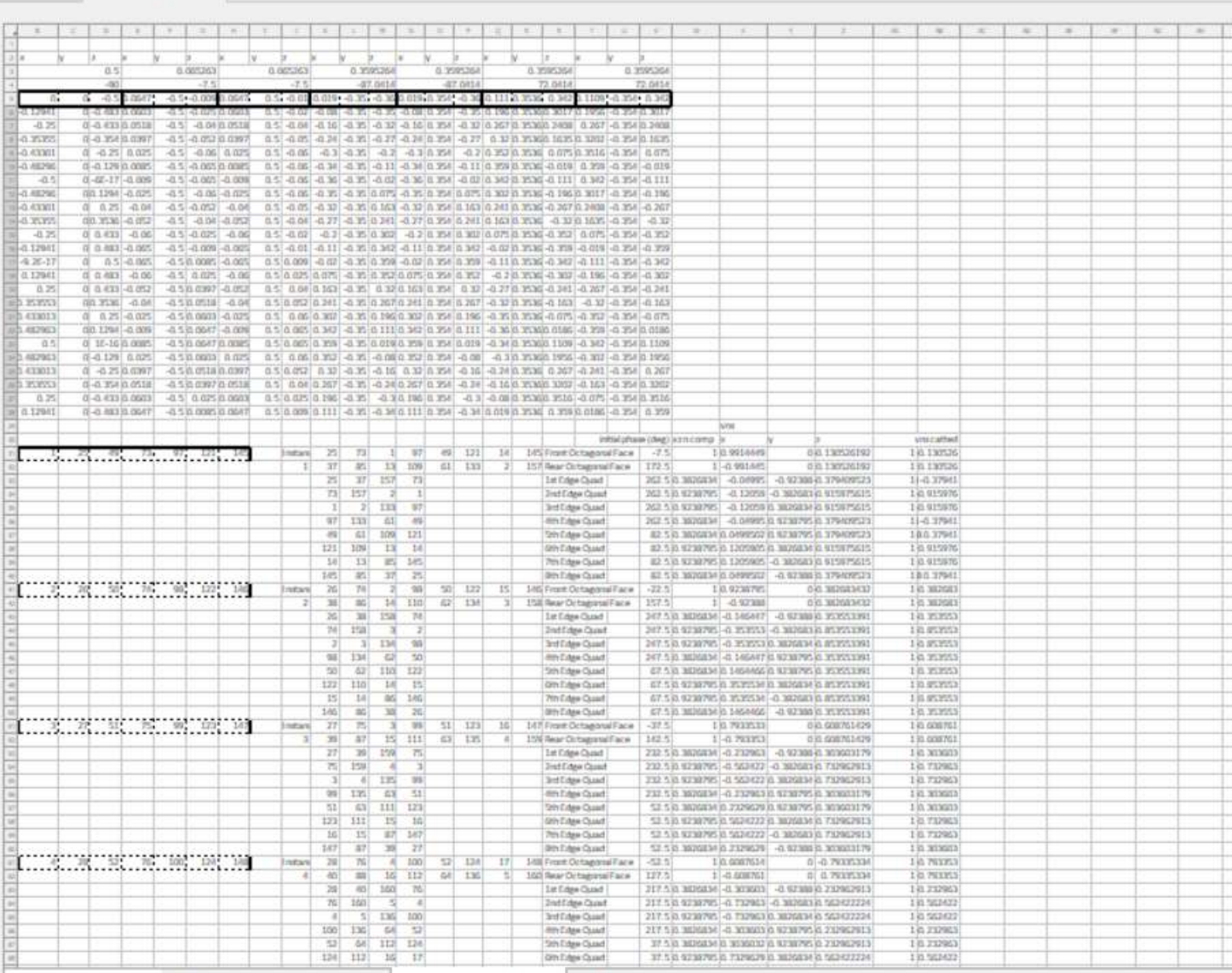
-flowingpoint

Explorer | koin.xlsx



GOL variation | Coin vts | Vertices and faces | Revised vertices | +

Explorer | koin.xlsx



GOL variation | Coin vts | Vertices and faces | Revised vertices | +

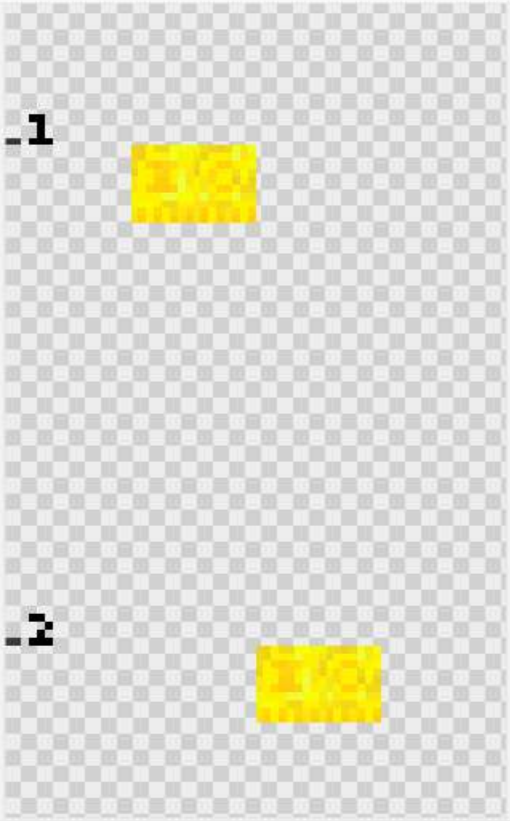
Explorer | koin.xlsx

	P	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS
1	1	24			25	48			49	72			73	96			97	120			121	144			145	168															
2	y		z	x	y	z	x	y	z	x	y	z	x	y	z	x	y	z	x	y	z	x	y	z																	
3		0.5			0.065263			0.065263			0.3595264			0.3595264			0.3595264			0.3595264																						
4		90			7.5			7.5			87.0414			87.0414			72.0414			72.0414																						
5	0	0.5	0.06	0.5	0	0.06	0.5	0	0.02	0.4	0.4	0.01856	0.35	0.4	0.11	0.35	0.34	0.11	0.4	0.34	1	v	0.0647	0.5	0.00852															
6	0	0.5	0.06	0.5	0	0.06	0.5	0	0.1	0.4	0.4	0.075	0.35	0.4	0.2	0.35	0.3	0.2	0.4	0.3	2	v	0.01856	0.35355	0.35905															
7	0	0.4	0.05	0.5	0	0.05	0.5	0	0.2	0.4	0.3	0.1635	0.35	0.3	0.27	0.35	0.24	0.27	0.4	0.24	3	v	0	0	0.5															
8	0	0.4	0.04	0.5	0.1	0.04	0.5	0.1	0.2	0.4	0.3	0.2408	0.35	0.3	0.32	0.35	0.16	0.32	0.4	0.16	4	v	0.01856	0.35355	0.35905															
9	0	0.3	0.02	0.5	0.1	0.02	0.5	0.1	0.3	0.4	0.2	0.3017	0.35	0.2	0.35	0.35	0.08	0.35	0.4	0.08	5	v	0.0647	0.5	0.00852															
10	0	0.1	0.01	0.5	0.1	0.01	0.5	0.1	0.3	0.4	0.1	0.342	0.35	0.1	0.36	0.35	0	0.36	0.4	0	6	v	0.11085	0.35355	0.34201															
11	0	0	0	0.5	0.1	0	0.5	0.1	0.4	0.4	0	0.359	0.35	0	0.34	0.35	0.1	0.34	0.4	0.1	7	v	0.12941	0	0.48296															
12	0	0.13	0	0.5	0.1	0	0.5	0.1	0.4	0.4	0.08	0.3516	0.35	0.08	0.3	0.35	0.2	0.3	0.4	0.2	8	v	0.11085	0.35355	0.34201															
13	0	0.25	0	0.5	0.1	0	0.5	0.1	0.3	0.4	0.16	0.3202	0.35	0.16	0.24	0.35	0.3	0.24	0.4	0.3	9	v	0.0647	0.5	0.00852															
14	0	0.35	0.1	0.5	0	0.1	0.5	0	0.3	0.4	0.24	0.267	0.35	0.24	0.16	0.35	0.3	0.16	0.4	0.3	10	v	0.11085	0.35355	0.34201															
15	0	0.43	0.1	0.5	0	0.1	0.5	0	0.2	0.4	0.3	0.1956	0.35	0.3	0.08	0.35	0.4	0.08	0.4	0.4	11	v	0	0	0.5															
16	0	0.48	0.1	0.5	0	0.1	0.5	0	0.1	0.4	0.34	0.1109	0.35	0.34	0	0.35	0.4	0	0.4	0.4	12	v	0.11085	0.35355	0.34201															
17	0	0.5	0.1	0.5	0.01	0.1	0.5	0.01	0	0.4	0.36	0.0186	0.35	0.36	0.1	0.35	0.3	0.1	0.4	0.3	13	v	0.0647	0.5	0.00852															
18	0	0.48	0.1	0.5	0.02	0.1	0.5	0.02	0.08	0.4	0.35	0.075	0.35	0.35	0.2	0.35	0.3	0.2	0.4	0.3	14	v	0.01856	0.35355	0.35905															
19	0	0.43	0.1	0.5	0.04	0.1	0.5	0.04	0.16	0.4	0.32	0.16345	0.35	0.32	0.3	0.35	0.2	0.3	0.4	0.2	15	v	0.12941	0	0.48296															
20	0	0.35	0	0.5	0.05	0	0.5	0.05	0.24	0.4	0.27	0.24076	0.35	0.27	0.3	0.35	0.2	0.3	0.4	0.2	16	v	0.01856	0.35355	0.35905															
21	0	0.25	0	0.5	0.06	0	0.5	0.06	0.3	0.4	0.2	0.30167	0.35	0.2	0.4	0.35	0.1	0.4	0.4	0.1																					
22	0	0.13	0	0.5	0.06	0	0.5	0.06	0.34	0.4	0.11	0.34201	0.35	0.11	0.4	0.35	0.02	0.4	0.4	0.02																					
23	0	0	0.01	0.5	0.06	0.01	0.5	0.06	0.36	0.4	0.02	0.35905	0.35	0.02	0.3	0.35	0.11	0.3	0.4	0.11																					
24	0	0.1	0.02	0.5	0.06	0.02	0.5	0.06	0.35	0.4	0.1	0.35162	0.35	0.1	0.3	0.35	0.2	0.3	0.4	0.2																					
25	0	0.3	0.04	0.5	0.05	0.04	0.5	0.05	0.32	0.4	0.2	0.32022	0.35	0.2	0.2	0.35	0.27	0.2	0.4	0.27																					
26	0	0.4	0.05	0.5	0.04	0.05	0.5	0.04	0.27	0.4	0.2	0.26701	0.35	0.2	0.2	0.35	0.32	0.2	0.4	0.32																					
27	0	0.4	0.06	0.5	0.02	0.06	0.5	0.02	0.2	0.4	0.3	0.19559	0.35	0.3	0.1	0.35	0.35	0.1	0.4	0.35																					
28	0	0.5	0.06	0.5	0.01	0.06	0.5	0.01	0.11	0.4	0.3	0.11085	0.35	0.3	0.02	0.35	0.36	0.02	0.4	0.36																					
29	0	0.5	0.06	0.5	0	0.06	0.5	0	0.02	0.4	0.4	0.01856	0.35	0.4	0.11	0.35	0.34	0.11	0.4	0.34																					
30	0	0.5	0.06	0.5	0	0.06	0.5	0	0.1	0.4	0.4	0.075	0.35	0.4	0.2	0.35	0.3	0.2	0.4	0.3	17	v	0.0603	0.5	0.02498															
31	0	0.4	0.05	0.5	0	0.05	0.5	0	0.2	0.4	0.3	0.1635	0.35	0.3	0.27	0.35	0.24	0.27	0.4	0.24	18	v	0.075	0.35355	0.35162															
32	0	0.4	0.04	0.5	0.1	0.04	0.5	0.1	0.2	0.4	0.3	0.2408	0.35	0.3	0.32	0.35	0.16	0.32	0.4	0.16	19	v	0.12941	0	0.48296															
33	0	0.3	0.02	0.5	0.1	0.02	0.5	0.1	0.3	0.4	0.2	0.3017	0.35	0.2	0.35	0.35	0.08	0.35	0.4	0.08	20	v	0.075	0.35355	0.35162															
34	0	0.1	0.01	0.5	0.1	0.01	0.5	0.1	0.3	0.4	0.1	0.342	0.35	0.1	0.36	0.35	0	0.36	0.4	0	21	v	0.0603	0.5	0.02498															
35	0	0	0	0.5	0.1	0	0.5	0.1	0.4	0.4	0	0.359	0.35	0	0.34	0.35	0.1	0.34	0.4	0.1	22	v	0.19559	0.35355	0.30167															
36	0	0.13	0	0.5	0.1	0	0.5	0.1	0.4	0.4	0.08	0.3516	0.35	0.08	0.3	0.35	0.2	0.3	0.4	0.2	23	v	0.25	0	0.43301															
37	0	0.25	0	0.5	0.1	0	0.5	0.1	0.3	0.4	0.16	0.3202	0.35	0.16	0.24	0.35	0.3	0.24	0.4	0.3	24	v	0.19559	0.35355	0.30167															
38	0	0.35	0.1	0.5	0	0.1	0.5	0	0.3	0.4	0.24	0.267	0.35	0.24	0.16	0.35	0.3	0.16	0.4	0.3	25	v	0.0647	0.5	0.00852															
39	0	0.43	0.1	0.5	0	0.1	0.5	0	0.2	0.4	0.3	0.1956	0.35	0.3	0.08	0.35	0.4	0.08	0.4	0.4	26	v	0.01856	0.35355	0.35905															
40	0	0.48	0.1	0.5	0	0.1	0.5	0	0.1	0.4	0.34	0.1109	0.35	0.34	0	0.35	0.4	0	0.4	0.4	27	v	0.12941	0	0.48296															
41	0	0.5	0.1	0.5	0.01	0.1	0.5	0.01	0	0.4	0.36	0.0186	0.35	0.36	0.1	0.35	0.3	0.1	0.4	0.3	28	v	0.01856	0.35355	0.35905															
42	0	0.48	0.1	0.5	0.02	0.1	0.5	0.02	0.08	0.4	0.35	0.075	0.35	0.35	0.2	0.35	0.3	0.2	0.4	0.3	29	v	0.0647	0.5	0.00852															
43	0	0.43	0.1	0.5	0.04	0.1	0.5	0.04	0.16	0.4	0.32	0.16345	0.35	0.32	0.3	0.35	0.2	0.3	0.4	0.2	30	v	0.11085	0.35355	0.34201															
44	0	0.35	0	0.5	0.05	0	0.5	0.05	0.24	0.4	0.27	0.24076	0.35	0.27	0.3	0.35	0.2	0.3	0.4	0.2	31	v	0.25	0	0.43301															
45	0	0.25	0	0.5	0.06	0	0.5	0.06	0.3	0.4	0.2	0.30167	0.35	0.2	0.4	0.35	0.1	0.4	0.4	0.1	32	v	0.11085	0.35355	0.34201															
46	0	0.13	0	0.5	0.06	0	0.5	0.06	0.34	0.4	0.11	0.34201	0.35	0.11	0.4	0.35	0.02	0.4	0.4	0.02																					
47	0	0	0.01	0.5	0.06	0.01	0.5	0.06	0.36	0.4	0.02	0.35905	0.35	0.02	0.3	0.35	0.11	0.3	0.4	0.11																					
48	0	0.1	0.02	0.5	0.06	0.02	0.5	0.06	0.35	0.4	0.1	0.35162	0.35	0.1	0.3	0.35	0.2	0.3	0.4	0.2																					
49	0	0.3	0.04	0.5	0.05	0.04	0.5	0.05	0.32	0.4	0.2	0.32022	0.35	0.2	0.2	0.35	0.27	0.2	0.4	0.27																					

The set of 384 vertices includes many repeats of the initial 168 unique ones, but made duplicating instances easier I think...

GOL variation | Coin vts | Vertices and faces | Revised vertices | +

Tools Brushes Shapes Size Colours Layers



488%

coinstrip64x1536

default_stone

diagsteps_8r

grass

high_shrub

inv_coin inv_coin2 inv_coin3


:00:02
ecording 2024-08-24 122252